

Rebuild Hawaii Consortium Meeting
May 13, 2003

*You can find copies of these minutes and presentations on the Internet at
<http://www.hawaii.gov/dbedt/ert/rebuild/news.html>.*

Attendees:

City & County of Honolulu— Steve Holmes, Allyn Lee; **County of Hawaii**— Raymond Carr; **County of Kauai**— Glenn Sato; **Department of Business, Economic Development & Tourism (DBEDT)** – Liz Raman, Howard Wiig, Dean Masai, David Rezachek; **Eco-Lite**— Tom Brennan; **Hawaii Army National Guard**— Kenneth Stacy; **Hawaiian Electric Company, Inc. (HECO)** – Jim Maskrey, Sam Nichols, Tom Van Liew, Bruce Watkins; **Hickam Air Force Base**— John Camara; **Housing & Community Development Corporation of Hawaii**— Wayne Nakamura; **Marine Corps Base Hawaii**— Bill Nutting; **Navy**— John Dunbar; **Navy PWC Pearl**— Nate Eisenpress; **NORESCO**— Tracy Taoka; **Pacific Division Naval Facilities Engineering**— Eric Kawamoto; **Pacific Energy**— Steve Olsen; **Pacific Enterprises Hawaii, Inc.**— Ellen Watson; **Strategic Energy Innovations**— Jennifer Tosaki; **The Gas Company**— Steve Golden, Lynn Ebisui; **U.S. Department of Energy Pacific Liaison**— Eileen Yoshinaka; **U.S. Department of Housing & Urban Development**— Ramona Mullahey; **University of Hawaii at Manoa School of Architecture**— Steve Meder; **Waterless Co.**— Arun Savara.

Welcome and Introductions

Consortium President, **Steve Holmes**, announces that he, Eileen Yoshinaka, and Ray Carr are part of the nominating committee to choose candidates for Consortium President and Vice President. The two-year terms for Steve Holmes, and Jim Maskrey, Vice President, are coming to an end this Fall 2003.

Ray Carr reported on **Rebuild America Peer Exchange Meeting** held in Santa Monica in March 2003. The meeting had six attendees from Hawaii including Cynthia Winans-Burns from Maui Montessori School. She presented a good challenge on how to develop Maui Montessori into a high performance green school. Another good presentation came from a lady from the City of Santa Monica. The City is working with the Regional Energy Efficiency Initiative and is mandating that city facilities meet at least the silver level of LEED certification. Ray went on two site visits, including, a \$54 million public safety building in construction and a recently completed affordable housing project called Colorado Courts. Colorado Courts is a 30,000 square foot building with 44 studio apartments. The project was built at a cost of \$4.3 million and had PV arrays on walls and a microturbine on the roof. The combination of all the energy improvements added an additional half million to construction costs with only a five year payback period. The building also contains carefully selected environmentally friendly materials.

There is a **New Rebuild America Partnership** at the City and County of Honolulu called Sustainable Honolulu. Under Sustainable Honolulu the City and County signed a Memorandum of Understanding between the City, State of Hawaii, and Department of Energy (DOE). A signing ceremony was held at Honolulu Hale with: Kathy Pierce, DOE; Ted Liu, DBEDT; Mayor Jeremy Harris, C&C of Honolulu. Sustainable Honolulu already has a couple of projects out the door. Over 800 of the County's fleet vehicles were converted to biodiesel. The City has a couple hundred acres of land it is looking at to possibly grow biodiesel crop. Steve has been in contact with the State Department of Agriculture to see if there are farmers interested in planting a crop that will be appropriate for growing biodiesel. Pacific Biodiesel is currently producing 160,000 gallons of biodiesel and has the capability of going up to 400,000 gallons. The Bus and Handivans need 6.5 million gallons of fuel every year. With an 80/20 plant they would need an additional 1.3 million gallons of product to meet demand.

Rolled out the solar water loan program for low to moderate income families. The loans are 0% interest loans for low income families and 2% interest for moderate income families. This is a large incentive along with the solar tax credits and HECO rebates. HECO will be doing all of the marketing of the program and the City has agreed to handle the paperwork on the loan program.

New Activity Reports by Consortium Members

City & County of Honolulu: Allyn Lee

In February 2003 held a workshop on Performance Contracting. They are still waiting to bring the new 220 kilowatt COGEN unit online and are working on the interconnection agreement with HECO.

Housing & Community Development Corporation of Hawaii: Wayne Nakamura
Unsuccessful getting Hope VI funds but will apply again this year.

County of Hawaii: Ray Carr

The Department of Water is using the U.S. DOE Pump System Assessment Tool (PSAT) software to assess the efficiency of pump systems, and then is preferably using the most efficient pump identified at each station. They are also identifying potential sites where they can move to a Rider M with HELCO that provides benefits for a customer reducing on-peak demand. To do this often requires substantial storage capacity, however.

The DWS and HELCO have gotten together recently and are looking into hydro recovery from high-level water as it cascades down to sea level with the aim of capturing this energy (estimated up to 1 Megawatt).

The Wastewater Division is interested in Cogeneration for one of their Hilo facilities. The County Energy Coordinator is drafting an RFP for them.

The County is also trying to get a solar revolving fund set up for Big Island. Presently it is being modeled after the one currently being implemented on Maui. They are starting up with a quarter of a million dollar pot and hope to access a similar amount from the County's share of the Geothermal Royalty Fund. The solar revolving fund will target mainly low-income people. While revolving loans do provide interest free or very low interest loans to low-income people they still have to come up with roughly \$1,200 up front for the system. They may get this back from tax credits but it still can be a barrier for them to come up with that money up front.

Ray reported on one project that did not materialize. He drafted an RFP for the Parks & Recreation Department soliciting a photovoltaic system for the Kona Community Aquatic Center in Kailua-Kona. In theory the center seemed like a great venue for one of these systems. The idea was for the installation of the system to be fully funded by the successful contractor. The County received only one response to the RFP and the contractor who responded proposed a 25 kW rated capacity system. The system would only provide about 7-8% of energy that the facility actually uses. On the basis of this savings being so small the Director of Parks & Recreation decided not go ahead with it. They had hoped that the contractor would utilize some of the bleachers around the pool or the parking area as sites for the PV. It seems it just wasn't very economical for the contractor to do. The contractor was going to charge 16.4 cents for the power - on this basis, savings would be marginal, if any. Even in ideal locations with high electricity rates installing PV can still be a challenge.

The Energy Smart Schools at West Hawaii Explorations Academy (WHEA) had a successful first year. The charter school allows the students to choose which project based educational track they would like to participate in at the beginning of the year. Five students chose the energy track and participated in many energy related projects. The students who participated this year will recruit new students into the energy track next year and will build in new activities. The school is also installing a 10 kW PV system with monitoring equipment so students can analyze data coming in.

Department of Housing and Urban Development: Ramona Mullahey
HUD is making energy efficiency one of its top priorities. They are looking into ways to help educate their staff on Energy Star purchasing and energy efficiency measures. HUD will be working with HCDCH on the public housing side and energy and resource efficiency programs like Rebuild America and Energy Star. They also want to disseminate information from these types of programs to property owners and public housing authorities.

Hawaiian Electric Company (HECO): Sam Nichols
Energy Smart Schools is nearly complete at McKinley and Radford High Schools. Jennifer Tosaki has been working with the teachers and instructing the classes. The students are finishing up with their small business audits. It looks like the students will complete a total of 14 business audits. The students also made presentations to their schools on what they have been doing in the program and the results of their school audits. HECO's Corporate Communications filmed the students doing their presentations

and conducting a lighting audit at Precision Radio. The footage will be made into a commercial and run during the Electric Kitchen on Oceanic Cable Channel 16.

Marine Corps Base Hawaii: Bill Nutting

The experimental wave buoy project is moving forward. All the environmental hurdles have been addressed and they are now getting ready to lay the anchors for undersea cable. In September they will install a 25 Kilowatt buoy. A total of 6 buoys are planned for deployment.

Eco-Lite: Tom Brennan

Tom announced the upcoming July 9-10, 2003 Hawaii Lodging Hospitality & Foodservice Exposition at the Blaisdell. This is the first year the exposition will include a technology section. They will also have a special limited time, 8:30 –10:00 a.m., for invited guests to browse around the exposition before it opens to the public at 10:00 a.m. Tom submitted names of all the Rebuild Hawaii members to the VIP list.

Tom provided an update for Ron Tolleson on energy savings projects at Queen's Medical Center. The center recently retrofitted the light fixtures on its loading docks. They have gone from 24 down to 8 light fixtures by utilizing the Magnaray technology. They plan to implement these measures in other areas of the center.

Kaiser's parking structure will change out high pressure sodium lighting (150 watt) with compact fluorescent (36 watt) lighting.

Kuakini is partnering with HECO on an R&D program on the 5th floor of their parking lot. They will change the lighting system and paint a section of the floor and compare it with an area that uses a higher wattage and is not painted.

University of Hawaii at Manoa School of Architecture: Steve Meder

The Portable Classroom Project is monitoring classrooms at Waianae High School. Getting classroom temperature readings of 89° Fahrenheit at desk level, 100° to 101° Fahrenheit at the ceiling, and 95° to 100° Fahrenheit on walls. The temperatures are above the comfort range and make for an unpleasant environment for students to learn in. There are 1,700 portable classrooms currently in operation. The new portables are insulated and provide a more comfortable environment. The project is currently working on the design guidelines for existing portables. The challenge is, within the changing landscape of Department of Education, how do we approach this to really have an effective change on the comfort levels within the existing portables. If you would like to help work on this project then email Steve Meder at smeder@hawaii.edu or phone 956-4906.

Illuminating Engineering Society of North America: Howard Wiig

Recently had a virtual seminar on *Lighting and the Aging Eye* with a lot of good information on how you can improve lighting for people to see better and do it in an energy efficient manner. Hoping to do more virtual seminars in the future.

Hawaii Army National Guard: Kenneth Stacy

Update on their energy performance contract with Johnson Controls. They completed a financing workshop and since Hawaii National Guard is with the State they qualify for a municipal tax lease option so they are looking into that. Johnson Controls is done with the data and they will meet with Michael Chang at the end of the month to discuss the work proposal. If everything goes well they will probably start construction around mid July.

Hawaii Army National Guard's Regional Training Institute will receive close to \$20,000 in rebates from HECO for its installation of energy efficient lighting.

They are also looking into placing PV roof systems on two armories, one in Hilo and one on Kauai. Will need to get FAA approval for PV roof units

The Gas Company: Steve Golden

Steve reported on changes by the Legislature to the renewable tax credits. The tax credits were renewed but with some changes. There are now limits on the commercial for PV and wind of \$250,000. Also, after July 1, 2003 there will no longer be tax credits for ice storage or heat pumps.

Pacific Energy: Steve Olson

Pacific Energy did a project with Tom Brennan and Magnaray at Newton Estates Community Association. Replaced metal halide with a compact fluorescent technology. They got 60-70% energy savings and made the light quality better.

Presentations**Sea-water Air Conditioning Project**

David Rezacheck, DBEDT

Presented on *Sea Water District Cooling Feasibility Analysis for the State of Hawaii*.

View report at: <http://www.state.hi.us/dbedt/ert/swac.html>.

Benchmarking and Energy Efficiency

Tom Van Liew, HECO

Presented on energy benchmarking studies in Hawaii.

View presentation at: <http://www.hawaii.gov/dbedt/ert/rebuild/news.html>.

Mold

Ellen Watson, University of Hawaii

Presented facts about mold and what to do if your building has mold.

View handouts at: <http://www.hawaii.gov/dbedt/ert/rebuild/news.html>.

Upcoming Workshops and Events

Energy Efficiency Workshop: Supermarkets and Grocery Stores

June 20, 2003 from 8 a.m. to 12 p.m.

Pagoda Hotel

For more information call Marsha Saiki, HECO, at (808) 543-4743

HECO Energy Forum: Energy Efficiency in Government Facilities

June 17, 2003 from 8 a.m. to 4 p.m.

HEI Training Room #2

American Savings Bank Tower (formerly Pacific Tower)

For more information call Marsha Saiki, HECO, at (808) 543-4743

Hawaii Institute for Mold Control—Mold Remediation Seminars

June 17-18, 2003 from 8 a.m. – 5 p.m.

University of Hawaii

For more information call (808) 956-8400

Energy Auditing and Design Analysis for Architects and Engineers

June 19, 2003 from 8 a.m. to 4 p.m.

HEI Training Room #2

American Savings Bank Tower (formerly Pacific Tower)

For more information call Marsha Saiki, HECO, at (808) 543-4743

Hawaii Lodging Hospitality & Foodservice Expo

July 9-10, 2003

Blaisdell Center

Rebuild Hawaii Consortium Meeting

Tentatively planned for Tuesday, August 12, 2003 from 7:30 a.m. to 12 p.m.

HEI Training Room #2

American Savings Bank Tower (formerly Pacific Tower)

2003 PCEA Hawaii Conference & Expo

Sustaining the Future

September 25-27, 2003

Grand Wailea Resort

Wailea, Maui

For more information contact Joyce Nakasone at (808) 543-4751

Jennifer Tosaki prepared these minutes.